| V0 1 2 3                                  | 5(KEPAPTT) <sub>76</sub> 7 8 9 10-12 |  |  |  |  |  |
|---|--------------------------------------|--|--|--|--|--|
| V1 1 2 3                                  | (KEPAPTT) <sub>76</sub> 7 8 9 10-12  |  |  |  |  |  |
| V2 1 2 3                                  | (KEPAPTT) <sub>76</sub> 7 8 9 10-12  |  |  |  |  |  |
| V3 1 3(KEPAPTT) <sub>76</sub> 7 8 9 10-12 |                                      |  |  |  |  |  |
|   |                                      |  |  |  |  |  |
| 2 3                                       | SOMATOMEDIN B-LIKE DOMAIN            |  |  |  |  |  |
| 4 5                                       | HEPARIN SULFATE BINDING DOMAIN       |  |  |  |  |  |
| ···(KEPAPTT) <sub>76</sub> ···            | EXON 6 BOUNDARY LUBRICATION DOMAIN   |  |  |  |  |  |
| 8 9                                       | HEMOPEXIN-LIKE REPEATS               |  |  |  |  |  |
| `   |                                      |  |  |  |  |  |

Fig. 1A

|                         | ARTICULAR<br>CHONDROCYTES |        |          | SYNOVIAL<br>FIBROBLASTS |        |        |                               |
|-------------------------|---------------------------|--------|----------|-------------------------|--------|--------|-------------------------------|
| LUBRICIN/MFS<br>ISOFORM | EXON 2                    | EXON 4 | EXON 5   | EXON 2                  | EXON 4 | EXON 5 | PREDICTED<br>MOLECULAR WEIGHT |
| V0                      | +                         | +      | +        | +                       | +      | +      | 151.096 kDa                   |
| V1                      | +                         | +      | -        | +                       | +      | -      | 146.327 kDa                   |
| V2                      | +                         | •      | <u>.</u> | +                       | -      | -      | 140.894 kDa                   |
| V3                      |                           | -      | -        | -                       | -      | -      | 135.207 kDa                   |

Fig. 1B

**502** 630 V1 ATA ACA GAA [GAA···AAA] GTA AAA GAT AAC N<sup>203</sup> 630 352 V2 TGT GCA GAA [GTG···AAA] GTA AAA GAT AAC exon 3 C<sup>104</sup> A<sup>105</sup> E<sup>106</sup> N<sup>203</sup>  $V^{200}$  K 630 109 231 352 V3 TCA TCT CAA [GAT...GCG] GAG···GAA [GTG···AAA] GTA AAA GAT AAC  $\frac{\text{exon 3}}{\text{E}^{67} \cdots \text{E}^{106}}$ N<sup>203</sup>  $V^{200}$  K

Fig. 2